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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/551,587	04/18/2000	Michael L. Bean	LIT3-B113	2462
21611	7590	03/11/2005	EXAMINER	
SNELL & WILMER LLP 1920 MAIN STREET SUITE 1200 IRVINE, CA 92614-7230			JUNG, DAVID YIUK	
			ART UNIT	PAPER NUMBER
			2134	

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/551,587	BEAN ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	David Y Jung	2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1)  Responsive to communication(s) filed on 11/04.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

- 4)  Claim(s) 1-30 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 5-27, 29 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_ .  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_ .

## DETAILED ACTION

### ***Response to Arguments***

The crux of the Applicant's argument appears to be thus: that the particular splitting and combining of the rejected claims cannot be done by those of ordinary skill in the art even in light of the relied references. The Office disagrees. For example, Mazurenko teaches "refractive index (figure 1, e.g., interferometers, use of refractive index dispersion as a coding key)" for the motivation of implementing a coding key. This is not meant to be that the teachings are solely limited to the embodiments noted in Mazurenko. Applicant is requested to provide reasons why the relied references should be read more narrowly than has been done in the rejections.

### ***Claims Presented***

Claims 1-29 are presented for examination.

### ***Claim Rejections - 35 USC 103***

In regard to claim 29, Rutledge teaches "an apparatus comprising: an optical waveguide input; a first optical path having a variable refractive index related to the voltage of a message input; a second optical path having a variable refractive index related to the voltage of a key input; and an optical waveguide output; wherein the optical wave guide input, the first optical path, the second optical path, and optical waveguide output are optically coupled together such that light entering the apparatus

via the optical waveguide input is split such that a first portion of the light follows the first optical path and a second portion of the light follows the second optical path, and any of the first portion of the light that passes through the first optical path is combined with any of the second portion of light that passes through the second optical path and exits the apparatus via the optical waveguide output. (figure 1, e.g., encryption and timing circuitry 100, modulators 204 and 208)."

These passages of Rutledge are not explicit about "refractive index."

Mazurenko teaches "refractive index (figure 1, e.g., interferometers, use of refractive index dispersion as a coding key)" for the motivation of implementing a coding key.

It would have been obvious at the time of the claimed invention to modify the teachings of these passages of Rutledge and Mazurenko to have such "refractive index" for the motivation noted in the previous paragraphs.

Regarding claims 5-27, the features of these claims (as Applicant appears to acknowledge) are noted in claim 29. For the reasons noted in the rejection of claim 29, these claims are rejected.

#### ***Allowable Subject Matter***

Claims 1-4, 28 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art does not teach or suggest the particular encrypted message handling with such

particular use of controllable refractive index in the particular context of other limitations..

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

The art made of record and not relied upon is considered pertinent to applicant's disclosure. The art disclosed general background. They were cited in the previous Office Actions.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Points of Contact***

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 746-7238, (for formal communications intended for entry)

**Or:**

(703) 746-5606 (for informal or draft communications, please label "PROPOSED" or  
"DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the  
examiner should be directed to David Jung whose telephone number is (571) 272-3836  
or Greg Morse whose telephone number is (571) 272-3838.

Application/Control Number: 09/551,587  
Art Unit: 2134

Page 6

David Jung

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Primary Examiner

Art Unit 2134

March 7, 2005